

Fact Finder

Environmental Cleanup

Fact Sheet #15
August 1996

ENVIRONMENTAL INVESTIGATIONS COMPLETED AT CHILD STREET LANDFILL

INTRODUCTION

The Installation Restoration (IR) program is an ongoing Department of Defense effort being conducted at military facilities nationwide to find and clean up contamination from past waste disposal practices. This fact sheet is one in a series informing interested citizens about the environmental investigations and cleanup actions at NAS Jacksonville.

This fact sheet presents information on the recently completed *Remedial Investigation/Feasibility Study* (RI/FS) at the Child Street Area of NAS Jacksonville, designated as Operable Unit 1 (OU 1). The RI/FS was performed by the Navy working with the U.S. Department of Environmental Protection (USEPA) and the Florida Department of Environmental Protection (FDEP).

SITE DESCRIPTION AND HISTORY OF OPERABLE UNIT 1

The Child Street Area is located in the southern portion of NAS Jacksonville. The base golf course is north/northeast of the site, base housing is east, tree-filled areas are northwest and south, and a

restricted weapons storage area is west. Child Street (an internal roadway) and an unnamed stream pass through the site, as seen in Figure 1 on page 2.

Since 1940, the Navy disposed of various non-hazardous and hazardous wastes at the site over a 40-year period. These materials included household and sanitary waste, oil and solvents, and demolition and construction debris. Some of these materials were burned in open pits and trenches, and the residues were then covered with soil. Low level radioactive waste from paints used in aircraft dial manufacturing at NAS Jacksonville was also disposed of in the western area of OU 1 between 1940 and 1950.

To reduce risk at other sites, soil containing low levels of *radium* were removed from two other NAS Jacksonville waste sites, brought together, and placed in a designated area of the OU 1 landfill.

For more information about the environmental cleanup at NAS Jacksonville, call the Public Affairs Office at (904) 772-4032 or the Installation Restoration Manager at (904) 772-2717, ext. 5. A public information repository is also available at the Charles D. Webb Wescomett Branch of the Jacksonville Public Library, 6887 103rd Street, Jacksonville, FL 32210, (904) 778-7305.

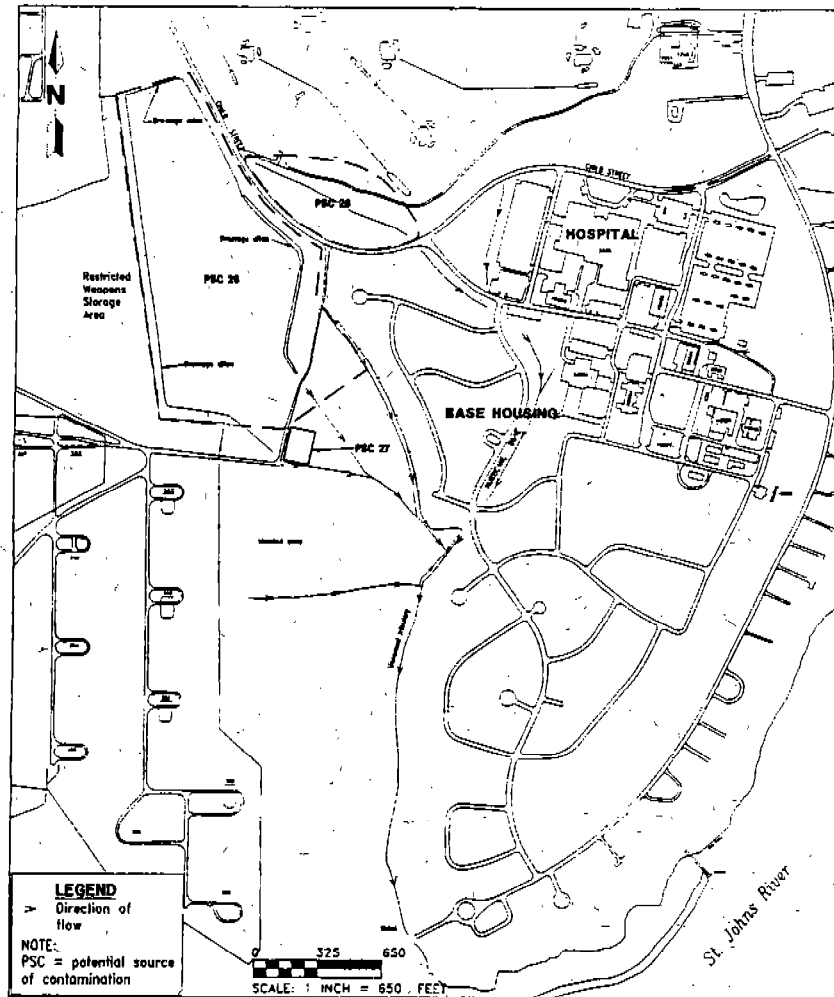
Two early cleanup projects, known as *Interim Removal Actions*, removed some of the oil-based contaminants at OU 1. In 1983, a recovery system was built to collect and remove these fluids by channeling water through a series of ditches and skimmers. The system operated for about nine months but wasn't effective and was shut down. A second recovery system was installed in 1994 and remains in use. It consists of two water collection trenches equipped with pumps to skim the oily fluid from the water surface.

This system will be used until the amount of this floating contamination is within federal/state legal requirements. Continued use of this recovery system is a key part of the permanent cleanup options proposed for OU 1.

HOW DOES THE CLEANUP PROCESS WORK?

The RI/FS for OU 1 described in this fact sheet is an important part of the overall cleanup approach for the site.

Figure 1 - Location of Operable Unit 1, including Potential Sources of Contamination (PSCs) 26 and 27.



This process includes:

- **Remedial Investigation and Risk Assessment** to locate and evaluate the site and identify conditions that pose potential risks to human health and the environment.
- **Feasibility Study** to identify and evaluate appropriate cleanup actions for the site.
- **Proposed Plan** to compare the cleanup actions which were evaluated and recommend the preferred cleanup action(s) for the site.
- **Public participation activities** to encourage members of the community and other interested parties to review and provide input on the Proposed Plan.
- **Record of Decision (ROD)** to legally document the selection of a permanent cleanup plan and to respond to comments raised during the public participation period, and
- **Remedial action** to complete the cleanup action documented in the ROD.

The RI/FS was completed for OU 1 in March, 1996. The Navy, USEPA, and FDEP have worked together to develop the Proposed Plan for the site. The base Restoration Advisory Board (RAB) provided community input on the Proposed Plan, and the Proposed Plan is

now available for public comment July 24 through September 7, 1996.

The public can submit written comments or can attend a public meeting scheduled for Tuesday, August 6, at the Holiday Inn in Orange Park, near the intersection of Rt. 17 and I-295.

REMEDIAL INVESTIGATION AND RISK ASSESSMENT RESULTS

The investigation into the contamination at OU 1 was completed in Spring, 1995. The investigation included sampling and analysis of water in streams (surface water), water under the ground (groundwater), the top 12 inches of soil, deeper soil (subsurface soil), stream mud (sediment), and air. A study of deeper soil conditions, soil chemistry, and types of plants and animals was also completed.

Studies called "risk assessments" were also performed to see if chemicals at the site are safe for humans, plants and animals. While this study considered future land uses, current land use restrictions do not allow future use of the landfill for any purpose, including construction of new buildings, due to possible health risks from water or soil contamination.

There are risks to plants and animals in surface water, soil, and sediment, which are the areas to which plants and animals would most likely come in contact. These risks include contact with metals and PCBs (an organic chemical).

Risks to plants and animals from groundwater, subsurface soil, and air were not evaluated as fully because plant and animal contact to these materials are less likely to occur. The risk results are summarized in Exhibit 1.

The preferred cleanup for landfill sites like OU 1 includes a physical barrier such as a *soil cover*, to contain the contaminants. This type of cleanup method is the minimal acceptable action to reduce the risks to human health and environmental at the site. The soil cover would address some risks identified by the risk assessment.

The five cleanup options studied in the Proposed Plan for OU 1 each include a soil cover system in their design.

Other risk assessment findings not addressed by a soil cover are also considered in the Proposed Plan and selection of the preferred site cleanup plan.

FEASIBILITY STUDY RESULTS

The Feasibility Study (FS) report was completed in March, 1996 and provides complete details of the five cleanup options identified in the FS phase. Each *cleanup alternative* was studied in the FS by considering the nine questions and issues summarized in Exhibit 2 on page 5.

Exhibit 1 - Remedial Investigation and Risk Assessment Results.

Medium Sampled	Human Health Risks		Ecological Risks
	Current Land Use	Future Land Use	
Groundwater	no	possible	not fully evaluated
Surface water	no	no	possible
Soil	no	possible (south of Child St.)	possible
Subsurface Soil	no	no	not fully evaluated
Sediment	no	no	possible
Air	no	possible (south of Child St.)	not fully evaluated

Exhibit 2

A Feasibility Study helps determine possible cleanup alternatives by considering the following questions and issues:

- Will it protect people and the environment?
- Will it meet Federal, state, and local legal requirements?
- Is it acceptable to the community?
- Will it remain effective over the time (30 years, including monitoring) it takes to cleanup the site?
- Will it reduce the harmful properties of the contaminant?
- Will it keep the contaminant from moving from its current location?
- Will it reduce amount of contaminant?
- Will it cause any harm to the environment or people in the initial phases of the cleanup?
- Is it cost-effective and practical for the site?

WHAT'S NEXT?

The Navy, working with USEPA, FDEP and the NAS Jacksonville RAB, reviewed the five cleanup alternatives evaluated in the FS. After this review, the Proposed Plan for OU 1 was released on July 24, 1996, summarizing the study and detailing the preferred cleanup action. The public comment period is from July 24, 1996 through September 7, 1996, and a public meeting will be held on August 6, 1996.

The community is encouraged to comment on the Proposed Plan and the preferred cleanup action during the public comment period and at the public meeting. The Navy will review public comments and publish responses to those comments in the ROD. After the ROD is released, the Navy will begin engineering design work to carry out the cleanup.

The Restoration Advisory Board. The RAB is an advisory panel composed of community members, Navy representatives, and government agencies such as USEPA, FDEP, and the City of Jacksonville. The RAB holds monthly meetings to discuss the cleanup actions on the NAS Jacksonville. The meetings are open to the public.

Public notices. Look for news stories or published notices about RAB meetings, the public comment period and the upcoming public meeting published in the *Florida Times-Union*.

Public comment period. Citizens and other interested parties can comment on the Proposed Plan from July 24, 1996 through September 7, 1996. These comments become part of the official record for OU 1.

Site mailing list. NAS Jacksonville maintains a mailing list of community members to receive updates on base cleanup activities. If you would like to be added to the mailing list, please contact Mr. Bill Dougherty, the IR Public Affairs Officer at (904) 772-4032.

Information availability. An Information Repository containing documents which include investigation work plans, investigation findings, decision documents, and summaries of applicable laws are available at:

Webb Wesconnett Branch Library
6887 103rd Street
Jacksonville, FL 32210

GLOSSARY

Cleanup alternative: A proposed cleanup action that outline how contamination at specific sites will be cleaned up.

Interim Remedial Action (IRA): Steps to manage or remove a source of contamination at a site at which a full investigation and cleanup recommendations are not yet complete.

Polychlorinated biphenyl (PCB): An organic chemical used in electrical transformers.

Proposed Plan: Compares evaluated cleanup actions and recommends preferred clean action(s) for the site.

Radium: A radioactive waste from paints used in glow in the dark aircraft dials.

Record of Decision (ROD): A legal document that outlines the selection of a permanent cleanup plan and responds to comments raised by the community during the public comment period.

Remedial Action (RA): To complete the cleanup action documented in the ROD.

Remedial Investigation/Feasibility Study (RI/FS): Involves locating and evaluating appropriate cleanup actions for the site.

Risk assessment: Evaluate the site to identify conditions that pose a threat to human health and the environment.

Soil cover: A layer of soil creating a physical barrier will be placed over the landfill site to contain contaminants.